



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau

**2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us**



DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

JAMES H. DAVIS, Ph.D.
Director
Resource Protection Division

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 7, 2012

Colonel John Kubinec
Base Commander
377 ABW/CC
2000 Wyoming Blvd. SE
Kirtland AFB, NM 87117-5606

John Pike
Director, Environmental Management Section
377 MSG/CEANR
2050 Wyoming Blvd.
Kirtland AFB

**RE: RESPONSE TO NMED LETTER DATED NOVEMBER 6, 2012; REPEAT SAMPLING AND GAS BUBBLES IN GROUNDWATER SAMPLES, BULK FUELS FACILITY SPILL, SOLID WASTE MANAGEMENT UNITS ST -106 AND SS-111, KIRTLAND AIR FORCE BASE, NEW MEXICO, NOVEMBER 30, 2012
KIRTLAND AIR FORCE BASE, EPA ID# NM9570024423**

Dear Col. Kubinec and Mr. Pike:

The New Mexico Environment Department (NMED) has reviewed the document *Response to NMED Letter Dated November 6, 2012 Repeat Sampling and Gas Bubbles in Groundwater Samples Bulk Fuels Facility Spill, Solid Waste Management Units ST-106 and SS-111 Kirtland Air Force Base, New Mexico*, dated November 30, 2012.

The NMED is in agreement that sampling and analysis of the gas bubbles should be conducted again. However, NMED has several concerns that need to be addressed before this work begins. These concerns are enumerated as follows.

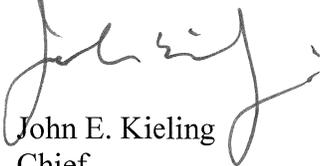
1. An ambient air sample needs to be obtained and analyzed to provide "background conditions". Previously, the Permittee compared gas sample analyses to a published reference for air components, which may not present accurate information for the Bulk Fuels Facility Spill site.
2. The Isotech Laboratories, Inc. website (<http://www.isotechlabs.com/customer-support/sampling-procedures/IsoBagSM.pdf>)

states: "..... When using a pump, it should be capable of maintaining a constant pressure at or above that which exists within the aquifer. This is to ensure that gases dissolved in the water within the aquifer remain dissolved until the water is transferred into an IsoBag®. If using a pulsating pump such as a bladder pump, please contact Isotech for additional recommendations." The Permittee must contact Isotech and report to the NMED additional recommendations made by Isotech, if any, concerning the use of their product in this particular situation, which includes both the pressure in the tubing being below ambient aquifer pressure and use of a pulsating pump.

3. The second bullet of page 3 states "Based on experience with similar sites in New Mexico, where ARCH has been used and has resulted in bubbles, the bubbles caused by this drilling method will be persistent with time." The Permittee must provide details describing which sites this statement refers to and what relevant conditions are similar between these sites and the Bulk Fuels Facility Spill area.
4. The analysis of only two gas samples is insufficient. Propose at least four additional samples that are to be taken at well locations along the entire length of the plume and at different depths where bubbles have been observed during water sampling.

The Permittee must respond to this letter by **January 10, 2012**. If you have any questions regarding this letter, please contact Mr. William Moats of my staff at (505) 222-9551.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: J. Davis, NMED HWB
W. Moats, NMED HWB
W. McDonald, NMED HWB
S. Brandwein, NMED HWB
J. Schoeppner, NMED GWQB
S. Reuter, NMED PSTB
B. Gallegos, AEHD
R. Shean, ABCWUA
L. King, EPA-Region 6 (6PD-N)
File: Reading and KAFB 2012